EXPIRATION DATE - March 31, 2021



WPDES PERMIT

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE

Noble View Cheese Company, Inc

ELIMINATION SYSTEM

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from a facility located at

N1598W County Road A, Adell, WI

to

Groundwater of the Milwaukee River Basin in Sheboygan County

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

The permittee shall not discharge after the date of expiration. If the permittee wishes to continue to discharge after this expiration date an application shall be filed for reissuance of this permit, according to Chapter NR 200, Wis. Adm. Code, at least 180 days prior to the expiration date given below.

	f Wisconsin Department of Natural Resources Secretary
Ву	Tim Ryan Wastewater Field Supervisor
	Date Permit Signed/Issued

PERMIT TERM: EFFECTIVE DATE - April 01, 2016

TABLE OF CONTENTS

1.1 SAMPLING POINT(S) 1.2 MONTIORING REQUIREMENTS AND LIMITATIONS 1.2.1 Sampling Point (Outfall) 001 - SUBSURFACE ABSORPTION FIELD, Subsurface Absorption (Drain Fields) 2 LAND APPLICATION REQUIREMENTS 3.3 SAMPLING POINT(S) 2.1.1 Additional Land Application Requirements 3.3 SCHEDULES 3.1 LAND TREATMENT (SUBSURFACE ABSORPTION FIELD) MANAGEMENT PLAN 4 STANDARD REQUIREMENTS 4.1 REPORTING AND MONTIORING REQUIREMENTS 4.1.2 Sampling and Testing Procedures 4.1.3 Recording of Results 4.1.3 Recording of Results 4.1.4 Reporting of Monitoring Results 4.1.5 Records Retention 4.1.6 Other Information 4.2 SYSTEM OPERATING REQUIREMENTS 4.2 Noncompliance Reporting 4.2.2 Bypass 4.2.4 Controlled Diversions 4.2.5 Proper Operation and Maintenance 4.2.6 Spill Reporting 4.2.1 Planned Changes 4.2.8 Proper Operation and Maintenance 4.2.1 Planned Treatment Annual Report 4.3.1 Subsurface Absorption System - Discharge Restrictions 4.3.2 Land Treatment Annual Report 4.3.3 Subsurface Absorption System - Pretreatment Required 4.3.4 Subsurface Absorption System - Prictament Systems 4.4.5 United Treatment Annual Report 4.4.4 Other Methods of Disposal or Distribution Report 4.4.5 Land Application Report Liquid Wastes and By-Product Solids 4.4.6 Disposaling Requirements for Liquid Wastes and By-Product Solids 4.4.10 Ranoff 4.4.10 R	1 LAND TREATMENT REQUIREMENTS	1
2.1. SAMPLING POINT(S) 3 2.1.1. Additional Land Application Requirements 3 3 SCHEDULES 4 3.1. LAND TREATMENT (SUBSURFACE ABSORPTION FIELD) MANAGEMENT PLAN 4 4 STANDARD REQUIREMENTS 5 4.1. REPORTING AND MONITORING REQUIREMENTS 5 4.1. 1. Monitoring Results 5 4.1. 2. Sampling and Testing Procedures 5 4.1. 3. Recording of Results 5 4.1. 4. Reporting of Monitoring Results 5 4.1. 5. Records Retention 6 4.1. 6. Other Information 6 4.1. 5. Noncompliance Reporting 6 4.2. 1. Noncompliance Reporting 6 4.2. 2. Bypass 7 4.2. 2. Bypass 7 4.2. 4. Controlled Diversions 7 4.2. 4. Controlled Diversions 7 4.2. 5. Spill Reporting 8 4.2. 7. Planned Changes 8 4.2. 8. Dury to Halt or Reduce Activity 8 4.3. LAND TREATMENT REQUIREMENTS FOR INDUSTRIAL DISCHARGES 8 4.3. 1. Chronulas for Land Treatment Calculations 8 4.3. 2. Land Treatment Annual Report 9 <td< th=""><th>1.2 Monitoring Requirements and Limitations</th><th>1</th></td<>	1.2 Monitoring Requirements and Limitations	1
2.1.1 Additional Land Application Requirements 3 SCHEDULES 3.1 LAND TREATMENT (SUBSURFACE ABSORPTION FIELD) MANAGEMENT PLAN 4 STANDARD REQUIREMENTS 5.1.1 AND MONITORING REQUIREMENTS 5.2 A.1.2 Sampling and Testing Procedures 5.3 A.1.2 Sampling and Testing Procedures 6.4.1.3 Recording of Results 6.4.1.4 Reporting of Monitoring Results 7.5 A.1.5 Recording of Results 7.6 A.1.6 Noncompliance Retention 7.7 A.1.6 Recording of Results 7.8 A.1.7 Recording of Results 7.8 A.1.8 Recording of Results 7.9 A.1.9 Recording of Results 7.0 A.1.0 Recording of Results 7.0 A.1.0 Recording of Results 7.0 A.1.1 Reporting of Monitoring Results 7.0 A.1.2 Noncompliance Reporting 7.0 A.1.1 Recording Recording Recording 7.0 A.1.2 Recording of Recording Requirements for Liquid Wastes and By-Product Solids 7.1 A.1.1 Chloride Requirements for Liquid Wastes and By-Product Solids and Sludges 7.2 A.1.1 Recording Requirements for Liquid Wastes and By-Product Solids and Sludges 7.3 A.1.1 Recording Recording Requirements for Liquid Wastes and By-Product Solids and Sludges 7.3 A.1.10 Recording Requirements for Liquid Wastes and By-Product Solids 7.3 A.1.10 Recording Recording Requirements for Liquid Wastes and By-Product Solids 7.3 A.1.10 Recording Recor	2 LAND APPLICATION REQUIREMENTS	3
3.1 LAND TREATMENT (SUBSURFACE ABSORPTION FIELD) MANAGEMENT PLAN 4 4 STANDARD REQUIREMENTS 5 4.1. REPORTING AND MONITORING REQUIREMENTS 5 4.1.2 Monitoring Results 5 4.1.3 Recording of Results 5 4.1.4 Reporting of Monitoring Results 5 4.1.5 Cother Information 6 4.1.5 Other Information 6 4.2 SYSTEM OPERATING REQUIREMENTS 6 4.2.1 Noncompliance Reporting 6 4.2.2 Bypass 7 4.2.3 Excheduled Bypass 7 4.2.4 Controlled Diversions 7 4.2.5 Proper Operation and Maintenance 8 4.2.5 Proper Operation and Maintenance 8 4.2.6 Spill Reporting 8 4.2.7 Planned Changes 8 4.2.8 Duty to Halt or Reduce Activity 8 4.3 LAND TREATMENT REQUIREMENTS FOR INDUSTRIAL DISCHARGES 8 4.3.1 Formulas for Land Treatment Calculations 8 4.3.2 Land Treatment Annual Report 9 4.3.3 Chloride Requirements for Land Treatment Required 4.3.5 Subsurface Absorption System Pretreatment Required 4.3.5 Subsurface Absorption System Pretreatment Required 4.3.6 Subs		
4.1 REPORTING AND MONITORING REQUIREMENTS 5 4.1.1 Monitoring Results 5 4.1.2 Sampling and Testing Procedures 5 4.1.3 Recording of Results 5 4.1.4 Reporting of Monitoring Results 5 4.1.5 Records Retention 6 4.1.6 Other Information 6 4.2 SYSTEM OPERATING REQUIREMENTS 6 4.2 In Noncompliance Reporting 6 4.2.1 Noncompliance Reporting 6 4.2.2 Bypass 7 4.2.3 Scheduled Bypass 7 4.2.4 Controlled Diversions 7 4.2.5 Proper Operation and Maintenance 8 4.2.6 Spill Reporting 8 4.2.7 Planned Changes 8 4.2.8 Duty to Halt or Reduce Activity 8 4.3 LAND TREATMENT REQUIREMENTS FOR INDUSTRIAL DISCHARGES 8 4.3.1 Formulas for Land Treatment Calculations 8 4.3.2 Land Treatment Annual Report 9 4.3.3 Subsurface Absorption System - Discharge Restrictions 9 4.3.4 Subsurface Absorption System - Discharge Restrictions 9 4.3.5 Subsurface Absorption System Management Plan 9 4.4.1 Land Application Characteri	3 SCHEDULES	4
4.1.1 Monitoring Results 5.1.1 Monitoring Results 5.1.2 Sampling and Testing Procedures 5.1.3 Recording of Results 5.1.4.1.4 Reporting of Monitoring Results 5.1.4.1.5 Records Retention 6.1.5 Other Information 6.1.6 Other Information 6.1.6 Other Information 6.1.7 Other Information 6.1.8 Other Information 6.1.8 Other Information 6.1.9 Other Information 6.1.1 Other Information 6.1 Other Information 6.2 System Operation Reporting 7.1 Other Information 7.2 Other Information 7.3 Other Information 7.4 Other Information 7.5 Other Information 7.6 Other Information 7.7 Other Information 7.7 Other Information 7.8 Other Information 7.9 Other Information 7.0 Other Information 7.1 Other Information 7.2 Other Information 7.2 Other Information 7.3 Other Information 7.4 Other Information 7.5 Other Information 7.7 Other Information Information Information 7.7 Other Information Informatio	3.1 LAND TREATMENT (SUBSURFACE ABSORPTION FIELD) MANAGEMENT PLAN	4
4.1.1 Monitoring Results 4.1.2 Sampling and Testing Procedures 5.4.1.3 Recording of Results 5.5 4.1.4 Reporting of Monitoring Results 6.5 4.1.5 Records Retention 6.6 4.1.5 Other Information 6.6 4.2 SYSTEM OPERATING REQUIREMENTS 6.6 4.2.1 Noncompliance Reporting 6.6 4.2.2 System Operating Requirements 6.7 4.2.3 Scheduled Bypass 7.7 4.2.3 Scheduled Bypass 7.7 4.2.4 Controlled Diversions 7.7 4.2.5 Proper Operation and Maintenance 8.6 4.2.6 Spill Reporting 8.7 4.2.7 Planned Changes 8.8 4.2.7 Planned Changes 8.8 4.3.1 Formulas for Land Treatment Calculations 8.3 Land Treatment Annual Report 8.3.2 Land Treatment Annual Report 9.3.3 Chloride Requirements for Land Treatment Systems 9.4.3.3 Chloride Requirements for Land Treatment Required 9.4.3.5 Subsurface Absorption System - Discharge Restrictions 9.4.3.6 Subsurface Absorption System Discharge Restrictions 9.4.4.1 Land Application Characteristic Report 9.4.4.2 Monitoring and Calculation Report 9.4.4.3 Annual Land Application Characteristic Report 9.4.4.5 Land Application Size Approval 9.4.4.7 Chloride Requirements for Liquid Wastes and By-Product Solids 9.4.4.8 Nitrogen Requirements for Liquid Wastes and By-Product Solids 9.4.4.10 Runoff 9.4.4.11 Soil Incorporation Requirements 9.4.4.12 Soil Incorporation Requirements	4 STANDARD REQUIREMENTS	5
4.4.12 Additional Requirements from ch. NR 214, Wis. Adm. Code	4.1 REPORTING AND MONITORING REQUIREMENTS 4.1.1 Monitoring Results 4.1.2 Sampling and Testing Procedures 4.1.3 Recording of Results 4.1.4 Reporting of Monitoring Results 4.1.5 Records Retention 4.1.6 Other Information 4.2 SYSTEM OPERATING REQUIREMENTS 4.2.1 Noncompliance Reporting 4.2.2 Bypass 4.2.3 Scheduled Bypass 4.2.4 Controlled Diversions 4.2.5 Proper Operation and Maintenance 4.2.6 Spill Reporting 4.2.7 Planned Changes 4.2.8 Duty to Halt or Reduce Activity 4.3 LAND TREATMENT REQUIREMENTS FOR INDUSTRIAL DISCHARGES 4.3.1 Formulas for Land Treatment Calculations 4.3.2 Land Treatment Annual Report 4.3.3 Chloride Requirements for Land Treatment Systems 4.3.4 Subsurface Absorption System - Pretreatment Required 4.3.5 Subsurface Absorption System - Discharge Restrictions 4.3.6 Subsurface Absorption System - Discharge Restrictions 4.3.6 Subsurface Absorption System - Management Plan 4.4 LAND APPLICATION REQUIREMENTS 4.4.1 Land Application Characteristic Report 4.4.2 Monitoring and Calculating PCB Concentrations in Sludge 4.4.3 Annual Land Application Report 4.4.4 Other Methods of Disposal or Distribution Report 4.4.5 Land Application Site Approval 4.4.6 Operating Requirements for Liquid Wastes and By-Product Solids 4.4.8 Nitrogen Requirements for Liquid Wastes and By-Product Solids 4.4.9 Ponding 4.4.10 Runoff	5 5 5 5 6 6 6 6 7 7 7 8 8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10
	5 SUMMARY OF REPORTS DUE	14

1 Land Treatment Requirements

1.1 Sampling Point(s)

The discharge(s) shall be limited to the waste type(s) designated for the listed sampling point(s).

	Sampling Point Designation					
Sampling						
Point						
Number						
001	Sample shall be taken where the effluent exits the last septic tank prior to discharge to subsurface					
	absorption field. Flow is metered at the water supply well.					

1.2 Monitoring Requirements and Limitations

The permittee shall comply with the following monitoring requirements and limitations.

1.2.1 Sampling Point (Outfall) 001 - SUBSURFACE ABSORPTION FIELD, Subsurface Absorption (Drain Fields)

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate	Monthly Avg - LT	2,000 gpd	Daily	Total Daily	
BOD ₅ , Total		mg/L	1/6 Months	Grab	
Nitrogen, Total Kjeldahl		mg/L	1/6 Months	Grab	
Chloride		mg/L	1/6 Months	Grab	
pH Field		su	1/6 Months	Grab	
Nitrogen, Nitrite + Nitrate Total		mg/L	1/6 Months	Grab	

Daily Log - Monitoring Requirements and Limitations

All discharge and monitoring activity shall be documented on log sheets. Originals of the log sheets shall be kept by the permittee as described under "Records Retention" in the Standard Requirements section, and if requested, made available to the Department.

Parameters	Limit	Units	Sample Frequency	Sample Type
Cells Being Loaded	-	Cell Number	Daily	Log
Start to End Time	-	Date, Hour	Daily	Log

Annual Report – Monitoring Requirements and Limitations The Annual Report is due by January 31 st of each year for the previous calendar year.					
Parameters	Limit Units		Sample Frequency	Sample Type	
Total Volume Per Cell	730,000	Gallons	Annual	Total Annual	
Total Nitrogen per Cell	-	Pounds/Acre/Year	Annual	Calculated	
Total Chloride per Cell	-	Pounds/Acre/Year	Annual	Calculated	

1.2.1.1 Monthly Avg Flow – LT Calculation

The monthly average discharge flow for Land Treatment systems is calculated by dividing the total wastewater volume discharged for the month by the total number of days in the month.

2 Land Application Requirements

2.1 Sampling Point(s)

The discharge(s) shall be limited to land application of the waste type(s) designated for the listed sampling point(s) on Department approved land spreading sites or by hauling to another facility.

	Sampling Point Designation				
Sampling	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)				
Point					
Number					
002	The permittee's septic tank sludge is removed and hauled to another facility. The permittee is required to				
	submit form 3400-52 "Other Methods of Disposal or Distribution Report" by January 31 following each				
	year the sludge is hauled.				

2.1.1 Additional Land Application Requirements

The Department will continue to classify waste from Outfall 002 as industrial sludge as long as the discharge is hauled to another permitted facility. If the facility chooses to land apply, a modification will be needed to include additional monitoring requirements for land application. Department approval is needed prior to land application of sludge and shall be notified at least 60 days prior to application.

3 Schedules

3.1 Land Treatment (Subsurface Absorption Field) Management Plan

Required Action	Due Date
Management Plan: Submit a management plan to optimize the land treatment system performance and demonstrate compliance with ch. NR 214, Wis. Adm. Code. The plan shall specify information on pretreatment processes, monitoring procedures and other pertinent information in accordance with s. NR 214.16(5), Wis. Adm. Code.	07/01/2016

4 Standard Requirements

NR 205, Wisconsin Administrative Code (Conditions for Industrial Dischargers): The conditions in ss. NR 205.07(1) and NR 205.07(3), Wis. Adm. Code, are included by reference in this permit. The permittee shall comply with all of these requirements. Some of these requirements are outlined in the Standard Requirements section of this permit. Requirements not specifically outlined in the Standard Requirement section of this permit can be found in ss. NR 205.07(1) and NR 205.07(3).

4.1 Reporting and Monitoring Requirements

4.1.1 Monitoring Results

Monitoring results obtained during the previous month shall be summarized and reported on a Department Wastewater Discharge Monitoring Report. The report may require reporting of any or all of the information specified below under 'Recording of Results'. This report is to be returned to the Department no later than the date indicated on the form. A copy of the Wastewater Discharge Monitoring Report Form or an electronic file of the report shall be retained by the permittee.

Monitoring results shall be reported on an electronic discharge monitoring report (eDMR). The eDMR shall be certified electronically by a principal executive officer, a ranking elected official or other duly authorized representative. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

If the permittee monitors any pollutant more frequently than required by this permit, the results of such monitoring shall be included on the Wastewater Discharge Monitoring Report.

The permittee shall comply with all limits for each parameter regardless of monitoring frequency. For example, monthly, weekly, and/or daily limits shall be met even with monthly monitoring. The permittee may monitor more frequently than required for any parameter.

4.1.2 Sampling and Testing Procedures

Sampling and laboratory testing procedures shall be performed in accordance with Chapters NR 218 and NR 219, Wis. Adm. Code and shall be performed by a laboratory certified or registered in accordance with the requirements of ch. NR 149, Wis. Adm. Code. Groundwater sample collection and analysis shall be performed in accordance with ch. NR 140, Wis. Adm. Code. The analytical methodologies used shall enable the laboratory to quantitate all substances for which monitoring is required at levels below the effluent limitation. If the required level cannot be met by any of the methods available in NR 219, Wis. Adm. Code, then the method with the lowest limit of detection shall be selected. Additional test procedures may be specified in this permit.

4.1.3 Recording of Results

The permittee shall maintain records which provide the following information for each effluent measurement or sample taken:

- the date, exact place, method and time of sampling or measurements;
- the individual who performed the sampling or measurements;
- the date the analysis was performed;
- the individual who performed the analysis;
- the analytical techniques or methods used; and
- the results of the analysis.

4.1.4 Reporting of Monitoring Results

The permittee shall use the following conventions when reporting effluent monitoring results:

- Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 0.1 mg/L, report the pollutant concentration as < 0.1 mg/L.
- Pollutant concentrations equal to or greater than the limit of detection, but less than the limit of quantitation, shall be reported and the limit of quantitation shall be specified.
- For purposes of calculating NR 101 fees, the 2 mg/l lower reporting limits for BOD₅ and Total Suspended Solids shall be considered to be limits of quantitation
- For the purposes of reporting a calculated result, average or a mass discharge value, the permittee may substitute a 0 (zero) for any pollutant concentration that is less than the limit of detection. However, if the effluent limitation is less than the limit of detection, the department may substitute a value other than zero for results less than the limit of detection, after considering the number of monitoring results that are greater than the limit of detection and if warranted when applying appropriate statistical techniques.

4.1.5 Records Retention

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit for a period of at least 3 years from the date of the sample, measurement, report or application, except for sludge management forms and records, which shall be kept for a period of at least 5 years.

4.1.6 Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or correct information to the Department.

4.2 System Operating Requirements

4.2.1 Noncompliance Reporting

The permittee shall report the following types of noncompliance by a telephone call to the Department's regional office within 24 hours after becoming aware of the noncompliance:

- any noncompliance which may endanger health or the environment;
- any violation of an effluent limitation resulting from a bypass;
- any violation of an effluent limitation resulting from an upset; and
- any violation of a maximum discharge limitation for any of the pollutants listed by the Department in the permit, either for effluent or sludge.

A written report describing the noncompliance shall also be submitted to the Department as directed at the end of this permit within 5 days after the permittee becomes aware of the noncompliance. On a case-by-case basis, the Department may waive the requirement for submittal of a written report within 5 days and instruct the permittee to submit the written report with the next regularly scheduled monitoring report. In either case, the written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; the steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance; and if the noncompliance has not been corrected, the length of time it is expected to continue.

A scheduled bypass approved by the Department under the 'Scheduled Bypass' section of this permit shall not be subject to the reporting required under this section.

NOTE: Section 292.11(2)(a), Wisconsin Statutes, requires any person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance to notify the Department of Natural Resources immediately of any discharge not authorized by the permit. The discharge of a hazardous substance that is not authorized by this permit or that violates this permit may be a hazardous substance spill. To report a hazardous substance spill, call DNR's 24-hour HOTLINE at 1-800-943-0003.

4.2.2 Bypass

Except for a controlled diversion as provided in the 'Controlled Diversions' section of this permit, any bypass is prohibited and the Department may take enforcement action against a permittee for such occurrences under s. 283.89, Wis. Stats. The Department may approve a bypass if the permittee demonstrates all the following conditions apply:

- The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities or adequate back-up equipment, retention of untreated wastes, reduction of inflow and infiltration, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance. When evaluating feasibility of alternatives, the department may consider factors such as technical achievability, costs and affordability of implementation and risks to public health, the environment and, where the permittee is a municipality, the welfare of the community served; and
- The bypass was reported in accordance with the 'Noncompliance Reporting' section of this permit.

4.2.3 Scheduled Bypass

Whenever the permittee anticipates the need to bypass for purposes of efficient operations and maintenance and the permittee may not meet the conditions for controlled diversions in the 'Controlled Diversions' section of this permit, the permittee shall obtain prior written approval from the Department for the scheduled bypass. A permittee's written request for Department approval of a scheduled bypass shall demonstrate that the conditions for unscheduled bypassing are met and include the proposed date and reason for the bypass, estimated volume and duration of the bypass, alternatives to bypassing and measures to mitigate environmental harm caused by the bypass. The department may require the permittee to provide public notification for a scheduled bypass if it is determined there is significant public interest in the proposed action and may recommend mitigation measures to minimize the impact of such bypass.

4.2.4 Controlled Diversions

Controlled diversions are allowed only when necessary for essential maintenance to assure efficient operation provided the following requirements are met:

- Effluent from the wastewater treatment facility shall meet the effluent limitations established in the permit. Wastewater that is diverted around a treatment unit or treatment process during a controlled diversion shall be recombined with wastewater that is not diverted prior to the effluent sampling location and prior to effluent discharge;
- A controlled diversion may not occur during periods of excessive flow or other abnormal wastewater characteristics;
- A controlled diversion may not result in a wastewater treatment facility overflow; and
- All instances of controlled diversions shall be documented in wastewater treatment facility records and such records shall be available to the department on request.

4.2.5 Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit. The wastewater treatment facility shall be under the direct supervision of a state certified operator as required in s. NR 108.06(2), Wis. Adm. Code. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training as required in ch. NR 114, Wis. Adm. Code, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

4.2.6 Spill Reporting

The permittee shall notify the Department in accordance with ch. NR 706 (formerly NR 158), Wis. Adm. Code, in the event that a spill or accidental release of any material or substance results in the discharge of pollutants to the waters of the state at a rate or concentration greater than the effluent limitations established in this permit, or the spill or accidental release of the material is unregulated in this permit, unless the spill or release of pollutants has been reported to the Department in accordance with s. NR 205.07 (1)(s), Wis. Adm. Code.

4.2.7 Planned Changes

In accordance with ss. 283.31(4)(b) and 283.59, Stats., the permittee shall report to the Department any facility expansion, production increase or process modifications which will result in new, different or increased discharges of pollutants. The report shall either be a new permit application, or if the new discharge will not violate the effluent limitations of this permit, a written notice of the new, different or increased discharge. The notice shall contain a description of the new activities, an estimate of the new, different or increased discharge of pollutants and a description of the effect of the new or increased discharge on existing waste treatment facilities. Following receipt of this report, the Department may modify this permit to specify and limit any pollutants not previously regulated in the permit.

4.2.8 Duty to Halt or Reduce Activity

Upon failure or impairment of treatment facility operation, the permittee shall, to the extent necessary to maintain compliance with its permit, curtail production or wastewater discharges or both until the treatment facility operations are restored or an alternative method of treatment is provided.

4.3 Land Treatment Requirements for Industrial Discharges

NR 214, Wisconsin Administrative Code: The requirements of this section are based on ss. NR 214.12-16, Wis. Adm. Code, and apply to wastewater discharges to designed and constructed absorption pond, ridge & furrow, spray irrigation, overland flow and subsurface absorption treatment systems.

4.3.1 Formulas for Land Treatment Calculations

The permittee shall use the following formulas for land treatment calculations, unless an alternate calculation method is approved by the Department in the Land Treatment Management Plan.

4.3.1.1 Monthly Average Hydraulic Application Rate

Determine the monthly average hydraulic application rate (in gal/acre/day) for each outfall by calculating the total gallons of wastewater applied onto the site for the month, dividing that total by the number of wetted acres loaded during the month, and then dividing this resulting value by the number of days in the month. Enter this calculated monthly value on the Discharge Monitoring Report form in the box for the last day of the month, in the "Hydraulic Application Rate" column.

4.3.1.2 Annual Total Nitrogen per Cell or per Zone

(annual ave. concentration in mg/L) (tot. annual flow in million gallons per cell or zone) (8.34) = lbs/ac/yr acreage of cell or zone

4.3.1.3 Annual Total Chloride per Cell or per Zone

(annual ave. concentration in mg/L) (tot. annual flow in million gallons per cell or zone) (8.34) = lbs/ac/yr acreage of cell or zone

4.3.2 Land Treatment Annual Report

Annual Land Treatment Reports are due by January 31st of each year for the previous calendar year.

4.3.3 Chloride Requirements for Land Treatment Systems

Since chloride is not significantly treated by the soil, the chloride level of the wastewater treated on land shall be minimized to the extent that is technically and economically feasible. The goal is to protect groundwater quality and prevent exceedance of the 125 mg/L groundwater preventive action limit.

4.3.4 Subsurface Absorption System - Pretreatment Required

Prior to discharge to a subsurface absorption field, all wastewater shall be pretreated in a system approved by the Department.

4.3.5 Subsurface Absorption System - Discharge Restrictions

The volume of discharge to the subsurface absorption system shall be limited to prevent back-up of wastewater into the pretreatment system, or discharge of wastes to the ground surface, drain tiles, or to any surface waters.

4.3.6 Subsurface Absorption System Management Plan

The subsurface absorption system shall be operated and managed in accordance with a Department approved management plan. The management plan shall be consistent with the conditions listed in this permit and s. NR 214.16(5), Wis. Adm. Code which requires identification of pretreatment processes, monitoring procedures, etc. If operational changes are needed, the management plan shall be amended by submitting a written request to the Department for approval.

4.4 Land Application Requirements

4.4.1 Land Application Characteristic Report

The analytical results from testing of liquid wastes, by-product solids and sludges that are land applied shall be reported annually on the Characteristic Report Form 3400-49. The report form shall be submitted electronically no later than the date indicated on the form. Following submittal of the electronic Characteristic Report Form 3400-49, this form shall be certified electronically via the 'eReport Certify' page by a principal executive officer or duly authorized representative. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

The permittee shall use the following convention when reporting sludge monitoring results: Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 1.0 mg/kg, report the pollutant concentration as < 1.0 mg/kg.

All sludge results shall be reported on a dry weight basis.

4.4.2 Monitoring and Calculating PCB Concentrations in Sludge

When sludge analysis for "PCB, Total Dry Wt" is required by this permit, the PCB concentration in the sludge shall be determined as follows.

Either congener-specific analysis or Aroclor analysis shall be used to determine the PCB concentration. The permittee may determine whether Aroclor or congener specific analysis is performed. Analyses shall be performed in accordance with the following provisions and Table EM in s. NR 219.04, Wis. Adm. Code.

- EPA Method 1668 may be used to test for all PCB congeners. If this method is employed, all PCB congeners shall be delineated. Non-detects shall be treated as zero. The values that are between the limit of detection and the limit of quantitation shall be used when calculating the total value of all congeners. All results shall be added together and the total PCB concentration by dry weight reported. **Note**: It is recognized that a number of the congeners will co-elute with others, so there will not be 209 results to sum.
- EPA Method 8082A shall be used for PCB-Aroclor analysis and may be used for congener specific analysis as well. If congener specific analysis is performed using Method 8082A, the list of congeners tested shall include at least congener numbers 5, 18, 31, 44, 52, 66, 87, 101, 110, 138, 141, 151, 153, 170, 180, 183, 187, and 206 plus any other additional congeners which might be reasonably expected to occur in the particular sample. For either type of analysis, the sample shall be extracted using the Soxhlet extraction (EPA Method 3540C) (or the Soxhlet Dean-Stark modification) or the pressurized fluid extraction (EPA Method 3545A). If Aroclor analysis is performed using Method 8082A, clean up steps of the extract shall be performed as necessary to remove interference and to achieve as close to a limit of detection of 0.11 mg/kg as possible. Reporting protocol, consistent with s. NR 106.07(6)(e), should be as follows: If all Aroclors are less than the LOD, then the Total PCB Dry Wt result should be reported as less than the highest LOD. If a single Aroclor is detected then that is what should be reported for the Total PCB result. If multiple Aroclors are detected, they should be summed and reported as Total PCBs. If congener specific analysis is done using Method 8082A, clean up steps of the extract shall be performed as necessary to remove interference and to achieve as close to a limit of detection of 0.003 mg/kg as possible for each congener. If the aforementioned limits of detection cannot be achieved after using the appropriate clean up techniques, a reporting limit that is achievable for the Aroclors or each congener for the sample shall be determined. This reporting limit shall be reported and qualified indicating the presence of an interference. The lab conducting the analysis shall perform as many of the following methods as necessary to remove interference:

3620C – Florisil 3611B - Alumina

3640A - Gel Permeation 3660B - Sulfur Clean Up (using copper shot instead of powder)

3630C - Silica Gel 3665A - Sulfuric Acid Clean Up

4.4.3 Annual Land Application Report

The annual totals for the land application loadings of liquid wastes, by-product solids and sludges to field spreading sites shall be submitted electronically on the Annual Land Application Report Form 3400-55 by January 31, each year whether or not waste is land applied. Following submittal of the electronic Annual Land Application Report Form 3400-55, this form shall be certified electronically via the 'eReport Certify' page by a principal executive officer or duly authorized representative. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

4.4.4 Other Methods of Disposal or Distribution Report

The permittee shall submit electronically the Other Methods of Disposal or Distribution Report Form 3400-52 by January 31, each year whether or not waste is hauled to another facility, landfilled, incinerated, or stored in a manure pit. Following submittal of the electronic Report Form 3400-52, this form shall be certified electronically via the

'eReport Certify' page by a principal executive officer or duly authorized representative. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

4.4.5 Land Application Site Approval

The permittee is authorized to landspread permitted liquid wastes, by-product solids and sludges on sites approved in writing by the Department in accordance with ss. NR 214.17(2) and 214.18(2), Wis. Adm. Code. Any site use restrictions or granting of case-by-case exceptions shall be identified in the approval letter. If the permittee wishes to have approval for additional sites, application shall be made using Land Application Site Request Form 3400-053. Complete information shall be submitted about each site, including location maps and soil maps, any soil analyses results and other information showing that the site complies with all application requirements and permit conditions. Spreading on a site may commence upon receipt of Department approval. If an existing spreading site is found by the Department to be environmentally unacceptable, a written notice will be issued to withdraw approval of that site.

4.4.6 Operating Requirements/Management Plan

All land application sites used for treatment of liquid wastes, by-product solids and sludges shall be operated in accordance with a Department approved management plan. The management plan shall be consistent with the requirements of this permit, ss. NR 214.17 (3) and (6), and NR 214.18 (3) and (6), Wis. Adm. Code. If operational changes are needed, the land application management plan shall be amended by submitting a written request to the Department for approval. A land application management plan shall be submitted for approval at least 60 days prior to land application.

4.4.7 Chloride Requirements for Liquid Wastes and By-Product Solids

The total pounds of chloride applied shall be limited to 340 pounds per acre per 2 year period. Calculate the chloride loading as follows:

Wet Weight Solids: <u>lbs of solids X %solids X %chloride</u> = lbs chloride/acre acres land applied X 100 X 100

Liquid: $\frac{\text{mg/L chloride X (millions of gallons) X 8.34}}{\text{acres land applied}} = \text{lbs chloride/acre}$

4.4.8 Nitrogen Requirements for Liquid Wastes and By-Product Solids and Sludges

NR 214.17(4) and NR 214.18(4) Wis. Adm. Code specify that the total pounds of nitrogen land applied per acre per year shall be limited to the nitrogen needs of the cover crop minus any other nitrogen added to the land application site, including fertilizer or manure. Nitrogen applied can be calculated on the basis of plant available nitrogen, as long as the release of nitrogen from the organic material is credited to future years. This permit requires that the Total Kjeldahl Nitrogen calendar year application amount shall not exceed 165 pounds per acre per year, except when alternate numerical nitrogen loading limits (consistent with the above sections of NR 214) are approved in writing via the Department's land application management plan approval. Calculate nitrogen loading as follows ("TKN" represents "Total Kjeldahl Nitrogen"):

Wet Weight Solids and Sludges: <u>lbs of solids X % solids X % TKN</u> = lbs TKN/acre acres land applied X 100 X 100

Liquid: $\frac{\text{mg/L TKN X (millions of gallons) X 8.34}}{\text{acres land applied}} = \text{lbs TKN/acre}$

4.4.9 Ponding

The volume of liquid wastes land applied shall be limited to prevent ponding, except for temporary conditions following rainfall events. If ponding occurs all land application shall cease immediately. The permittee shall land apply only the liquid wastes that are permitted.

4.4.10 Runoff

The volume of liquid wastes land applied shall be limited to prevent runoff. If runoff occurs all land application shall cease immediately. The permittee shall land apply only the liquid wastes that are permitted.

4.4.11 Soil Incorporation Requirements

- Liquid Sludge Requirements: The Department may require that liquid sludge be incorporated into the soil on specific land application sites when necessary to prevent surface runoff or objectionable odors. Requirements and procedures for incorporation of liquid sludge, when such incorporation may be necessary, shall be specified in the management plan or in specific site applications, subject to Department approval. The permittee shall comply with the requirements in the Department approved management plan, specific site-approval requirements and the terms and conditions of this permit.
- Cake Sludge Requirements: After land application, cake sludge shall be incorporated into the soil. The
 timing of such incorporation and other related requirements and procedures shall be specified in the
 management plan or in specific site applications, subject to Department approval. The permittee shall
 comply with the requirements in the Department approved management plan, specific site-approval
 requirements and the terms and conditions of this permit.
- Liquid Wastewater Requirements: The Department may require that liquid wastewater be incorporated or injected into the soil on specific land application sites when necessary to prevent surface runoff or objectionable odors. Requirements and procedures for injection or incorporation of liquid wastewater, when such injection or incorporation is necessary, shall be specified in the management plan or in specific site applications, subject to Department approval. The permittee shall comply with the requirements in the Department approved management plan, specific site-approval requirements and the terms and conditions of this permit.
- By-Product Solids Requirements: The Department may limit the volume of by-products solids that are landspread on a specific site when necessary to prevent surface runoff or leaching of contaminants to groundwater and objectionable odors. By-product solids shall, after application, be plowed, disced, or otherwise incorporated into the soil. Requirements and procedures for the incorporation of byproduct solids into the soil shall be specified in the management plan or in specific site applications, subject to Department approval. The permittee shall comply with the requirements in the Department approved management plan, specific site-approval requirements and the terms and conditions of this permit.

4.4.12 Additional Requirements from ch. NR 214, Wis. Adm. Code

The requirements of s. NR 214.17 (4)(c) [pathogen prohibition for human consumption crop fields], (4)(d)1 [no adverse soil effects], (4)(d)10 [allowable whey spreading rates], and (4)(e)1-3 [by-product solids spreading within agricultural practices and not cause contamination] for landspreading of liquid wastes and by product solids and s. NR

214.18 (4)(b),(d)-(h) [application, nutrient, pH, metals, and PCB limitations] for sludge spreading systems are included by reference in this permit. The permittee shall comply with these requirements.

5 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Land Treatment (Subsurface Absorption Field) Management Plan - Management Plan	July 1, 2016	4
Characteristic Report Form 3400-49	no later than the date indicated on the form	9
Land Application Report Form 3400-55	January 31, each year whether or not waste is land applied	10
Report Form 3400-52	by January 31, each year whether or not waste is hauled to another facility, landfilled, incinerated, or stored in a manure pit	10
Annual Land Treatment Reports	by January 31st of each year for the previous calendar year	9
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	5

Report forms shall be submitted electronically in accordance with the reporting requirements herein. Any facility plans or plans and specifications for municipal, industrial, industrial pretreatment and non industrial wastewater systems shall be submitted to the Bureau of Water Quality, P.O. Box 7921, Madison, WI 53707-7921. All other submittals required by this permit shall be submitted to:

Southeast Region, 2300 N Dr ML King Drive, Milwaukee, WI 53212